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CLINICAL PERSPECTIVES IN LACTATION

BREASTFEEDING AND CANCER IN HIGH-RISK WOMEN

ABSTRACT BY MARY K. WASHBURN, RD/LD, CBE

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A recent article in the Journal of the National Cancer Institute, Vol. 96, No 14, July 21, 2004 stated “women at a very high risk of breast cancer – those with the BRCA1 mutations – get greater protection from the disease by breastfeeding than lower-risk women.”

Breastfeeding for one year or longer was associated with a 45% reduction in breast cancer risk among women with the genetic mutation who

participated in the study. However, breastfeeding did not appear to protect women with another genetic mutation associated with a very high risk of breast cancer known as BRCA2.

“The differences between women with BRCA1 and BRCA2 mutations may reflect underlying differences in the pathogenesis of cancers associated with the two genes. However, because our sample of women with BRCA2 mutations was

small, it is premature to conclude that a modest reduced risk is not present in this subgroup as well.”

“How breastfeeding is associated with a reduced risk of breast cancer is unclear but may be related to changes in mammary gland differentiation or to effects on breast estrogen levels.”



WHY OBESE WOMEN DON'T BREASTFEED BY PATRICIA DUNAVAN, MS, RD/LD

Studies have shown that overweight mothers are significantly more likely to quit breastfeeding their infants sooner than do healthy weight mothers. An important reason why is the

weaker biological response that heavier women have to their babies' suckling, according to a study conducted by researchers at Cornell University. Researchers found that over-

weight women have a lower prolactin response to suckling, according to the study, which was published in the journal *Pediatrics* (Vol. 113, No. 5, May 2004). Prolactin, a hormone produced by the

WHY OBESE WOMEN DON'T BREASTFEED, CONTINUED

pituitary gland, stimulates the mammary glands to produce milk soon after birth.

The study concluded that lower prolactin response to nursing compromises the ability of overweight women to produce milk and leads to a significantly shorter period of breastfeeding. The study measured prolactin and progesterone concentrations in 40 mothers just before and 30 minutes after breastfeeding, at 48 hours after delivery and again a week after birth. The overweight women had a body mass index (BMI) of at least 26 before conception.

The researchers found that the overweight women produced dramatically less prolactin 48 hours after birth and moderately less seven days after birth compared with the women who were not overweight. They found no significant differences in progesterone values. Progesterone helps maintain pregnancy and helps trigger milk

production as soon as its levels fall after giving birth.

Since fat tissue concentrates progesterone, the researchers had hypothesized that this additional source of progesterone in overweight women might delay milk production. However, the study did not support this hypothesis. Although obese women might have trouble breastfeeding for a combination of physical reasons, the new study is the first to find a biological reason.

In 1997 Rasmussen, the lead researcher, reported that overweight and obese mothers were 2.5 to 3.6 times, respectively, less successful in starting breastfeeding than mothers who were not overweight, and the heavier the mother, the less successful she was at breastfeeding. In 2001 Rasmussen reported that normal weight women who gain more than the 24 to 35 pounds during pregnancy recommended by the Institute of Medicine are 74 percent

more likely to be unsuccessful at breastfeeding than mothers who observe these guidelines. However, women who are obese before pregnancy do not further increase their already high risk of lactation failure, regardless of their weight gain after conception.

Rasmussen recommends overweight women who give birth should consult with a lactation expert to be sure they receive adequate breastfeeding education before being discharged from the hospital. Ideally, they also should receive follow-up support to help them continue to breastfeed.

K.M. Rasmussen, C.L. Kjolhede. *Prepregnant Overweight and Obesity Diminish the Prolactin Response to Suckling in the First Week Postpartum*. *Pediatrics*, Vol 113 No. 5, May 2004, pp. e465-e471.

CONTINUING TO BREASTFEED AFTER RETURNING TO WORK: A RECIPE FOR SUCCESS

By Amanda Hovis, nutrition education consultant

Texas WIC Newsletter, Fall 2004

With all of the great breastfeeding support WIC provides and the availability of free breast pumps, more and more WIC moms are choosing to continue breastfeeding when they return to work or school. However, the demands of school and work do pose challenges to the breastfeeding relationship, and

without proper planning and support many WIC moms find themselves unable to successfully combine the two. You can increase your clients' chance of success by making sure they are well prepared for their return.

TALKING TO EMPLOYERS

Many moms are nervous about speaking with their employer regarding breastfeeding. While most employers are happy to accommodate their breastfeeding employees, the law does not require that they do so. Encourage clients to schedule a



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CONTINUING TO BREASTFEED AFTER RETURNING TO WORK: A RECIPE FOR SUCCESS CONTINUED

meeting with their employer to discuss their return. If possible, this meeting can even take place before the baby arrives. At the meeting, clients should be prepared to talk about why they feel it is important that they continue to breastfeed and explain the benefits the employer receives for supporting breastfeeding. Here are a few ways breastfeeding benefits both the employee and the employer:

1. Studies of work-site lactation programs show that breastfed infants have fewer illnesses than formula-fed infants. That means lower health-care cost for employers. Studies have shown average savings of \$400 per breastfed baby.
2. Since breastfed babies are healthier, their parents use fewer sick days. The insurance company Aetna reported an average of three fewer sick days per breastfeeding employee. This was reported in the 1998 book, *Breastfeeding: The Best Investment*, by D. Bailey.
3. Over the long term, breastfeeding decreases the mother's risk of osteoporosis and breast and ovarian cancer. It also decreases the child's

risk of developing obesity, asthma, meningitis, food and airborne allergies; and diabetes. Thus breastfeeding may have the long-term impact of decreasing medical costs for employers.

4. Mothers who are able to continue working and breastfeeding are also more satisfied with their jobs and report increased loyalty to their employers. This leads to decreased turnover and increased morale and productivity among employees.

At the appointment your client should be prepared to discuss:

1. How she is planning to combine breastfeeding and working—for example, whether she is planning to pump at work or nurse the baby onsite.
2. Address any concerns the employer has regarding her desire to pump at work or nurse her baby on site.
3. Since the law does not require businesses to give women extra breaks for pumping, the employee should be prepared to offer to come in early or stay late to make up lost time used to pump or

nurse.

4. The employee should ask where she should store her breastmilk. It is perfectly safe to store human milk in a common-area or break-room refrigerator. If a refrigerator is unavailable, be sure to tell her that an insulated bag with ice packs will work.
5. She should also ask if there is a private space she can use to pump or nurse. If a separate private room is not available here are some other options:
 - If she has her own private office, see if she can pump there. If the door doesn't lock, she can hang a sign outside her door when pumping or see if the employer will have a lock installed so no one will accidentally walk in on her.
 - If she sits in a cubicle, she can use a shower curtain rod to hang a large curtain outside the cube when she needs to pump. They she can pump discreetly in her cubicle.



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